INTRODUCTION TO THE PLAN

he cultural and natural history of New Hampshire's Seacoast has long been shaped by the bountiful resources of its estuaries. The Seacoast's natural beauty and resource wealth, and access to markets, education, and recreation make the region a magnet for people and businesses. Continuing population growth is the greatest threat to the environmental health of the state's estuaries including Great Bay, Little Bay, and



Gundalow on Great Bay

Hampton/Seabrook Harbor (hereafter referred to as the "estuaries"). The *New Hampshire Estuaries Project Comprehensive Conservation and Management Plan* is a working document designed to help Seacoast communities protect, manage, and use their natural resource legacy responsibly, for the benefit of present and future generations.

THE TEAM

The planning phase of the NHEP has been guided by a 30-member Management Committee, chaired by the Director of the Office of State Planning, with assistance from four Project Teams: Water Quality, Land Use, Shellfish and Living Resources, and Outreach and Education. All the members of the Management Committee and the four Project Teams together make up the NHEP Management Conference – a group of approximately 75 individuals representing the interests of area citizens; recreational resource-users; the business, academic and scientific communities; local, state, and federal agencies and governments; and environmental organizations. The release of the draft *Management Plan* in December 1999 marked the conclusion of the primary planning phase of the project. This final Management Plan was revised following public comment and review. After approval, the final *Management Plan* will move into the implementation phase. The Management Committee will work to initiate, oversee, track, evaluate, and update implementation of the Action Plans.



DOCUMENT ORGANIZATION

This *Plan* reflects the work of many individuals, agencies, and organizations.

Chapter 2: State of the Estuaries is a thumbnail summary of the current status and trends of the environmental condition of the estuaries, based on a detailed analysis of current scientific research and knowledge of the estuaries completed for the NHEP.

Chapter 3: A Vision for New Hampshire's Estuaries outlines a consensus vision of people working together to protect and enhance the natural resources of the estuaries and the Seacoast region. This common vision was developed by the NHEP with the participation of citizens, local officials, University of New Hampshire scientists and educators, representatives of environmental organizations, businesses, and state and federal agencies. All aspects of the NHEP planning process involved this same broad representation. Chapter 3 presents a view of the possible – a realistic, reachable state of the estuaries for 2005 and beyond.

The key to understanding and implementing the *Plan* is recognizing that everything in the estuarine ecosystem

is connected to everything else. The *NHEP Plan* focuses on water quality because it is related to nearly all the priority problems identified for the estuaries, and because progress can be measured and accounted for. However, all five of the priority concerns – water quality, land use and habitat, shellfish resources, habitat restoration, and public outreach and education – are related to each other. All are essential aspects of the whole ecosystem and of the *Plan*.

These priorities are discussed in *Chapter 4: Water Quality; Chapter 5: Land Use, Development, and Habitat Protection; Chapter 6: Shellfish Resources; Chapter 7: Habitat Restoration; and Chapter 8: Public Outreach and Involvement.* These chapters provide more detailed background on estuarine environmental conditions, the most serious threats to the ecological health of the estuaries, and what can be done to protect and improve the estuarine environment. Each chapter contains an introduction, a statement of why the issue is important, the problems or challenges to be resolved, a summary of pertinent existing regulatory and management programs, and a series of detailed Action Plans.

Chapter 9: Regulation and Management reviews the institutional framework for managing estuaries at the local, regional, state and federal level.

Chapter 10: Implementation and Financing outlines strategies and funding sources, and Chapter 11: Summary of Recommended Actions ranks the Action Plans by priority.

Chapter 11: Monitoring Plan includes research and technical development needs and a monitoring plan to track progress and help ensure that efforts to protect New Hampshire's estuaries are responsive, dynamic, and effective.

ACTION PLANS

The Action Plans in this document were drafted by the NHEP Project Teams, refined based on suggestions from the public gathered at a series of open forums, and reviewed and revised by the NHEP Management Committee following the comment period on the Draft *Plan*.

Each Action Plan begins with a background statement and a list of actions or activities to achieve the desired outcome. Each Action Plan also includes a list of responsible parties, an estimate of costs and funding sources, a review of any anticipated regulatory needs, the expected benefits, monitoring and/or enforcement requirements, and a priority ranking in relation to the overall *Management Plan*.

The total estimated costs for all the Action Plans proposed in the *Plan* far exceed the financial resources at hand. The NHEP Management Committee has reviewed all the Action Plans and assigned priority rankings for implementation.

Highest priority actions are those deemed critical to achieving *Plan* goals, and will be pursued by the NHEP in the first four years of implementation (listed in Chapter 12, p. 12-2).

High priority actions were rated less critical to achieving *Plan* goals, and will receive less emphasis in the first four years of implementation.

Priority actions were considered good ideas to be pursued as time and resources allow.

Thanks to the contributions and leveraging afforded by partnerships forged within the NHEP, a modest amount of implementation funding can accomplish a significant amount of work, as some projects can be integrated into the work plans of Seacoast cities and towns, state agencies, and environmental organizations. This cooperation is made possible by the extensive human resources and expertise among partner agencies, institutions, and organizations; the consistency of program and organizational missions; and three years of active collaboration in project planning. The *Plan* also identifies potential funding from a variety of sources. As funding is obtained, related Action Plans will be implemented.

THE NATIONAL ESTUARY PROGRAM

The New Hampshire Estuaries Project is part of the National Estuaries Program (NEP), established by Congress in 1987 to recognize and protect "estuaries of national significance." The National Estuary Program is administered by the U.S. Environmental Protection Agency (EPA). Each estuary program completes four basic steps:

- Identify the major threats to the estuary through a review of scientific information and management structure, by sponsoring new research as needed, and enlisting citizens, business groups, and other stakeholders in creating a common vision for the estuary's future.
- Develop a Comprehensive Conservation and Management Plan (CCMP) that sets specific goals and allocates responsibility for achieving the goals among the NEP partners, regulatory agencies, local governments, and citizen or interest groups. This *Management Plan* is the New Hampshire Estuaries Project's CCMP.
- 3 Implement the Plan, working with all the various partners. Flexibility is emphasized to allow local governments and citizens to choose the most cost-effective and environmentally beneficial solutions for their communities to meet the Plan's goals.
- 4 Monitor progress made toward the Plan goals to determine the effectiveness of actions taken, and to focus on areas where problems are greatest.



PROJECT AREA

The NHEP project area covers the entire watershed for the estuaries. Towns as far west as Candia and as far north as Wakefield are within the drainage basin. Although approximately one third of the watershed lies in the state of Maine, the NHEP is focused on the New Hampshire portion. In recognition of the importance of proximity to the estuaries, the project was divided into two areas: Zone A and Zone B. Zone A municipalities are those towns that border on tidal waters, plus Rochester and Somersworth. Zone B municipalities are those in the drainage area but with no tidal shoreline. The BPA review of the local management framework focuses primarily on Zone A municipalities (see inside cover).

A Dynamic Plan

Estuaries are dynamic natural systems, subject to constant change. Change in the estuarine environment is as sure as the ebb and flow of the tides, and can be as powerful as the currents in the Piscataqua River. Because estuaries are complex, interconnected ecosystems, even a small change in one area can affect the whole system. Human activities add dramatically to changing conditions in the estuaries – both improving and degrading environmental conditions. The spirit of this *Plan* is to maximize the positive effects.

Recent decades have demonstrated how environmental quality and ecological health can rebound from a history of pollution and neglect. But increasing population and development pressures in New Hampshire's Seacoast region could degrade water quality and add stress to these sensitive ecosystems. Events both within the estuarine watersheds and in the ocean or world could have direct and indirect effects on our estuaries.

Scientists have learned much about the healthy functioning of estuaries, and about New Hampshire's Great Bay and coastal estuaries in particular. Still our scientific understanding is far from adequate. Researchers are also seeking solutions to estuarine environmental problems and ways to prevent future problems. The *NHEP Management Plan* is a working document designed to guide the protection and enhancement of the estuaries. It includes research and technical development needs and a monitoring plan to help ensure responsive, dynamic, and effective efforts to protect New Hampshire's estuaries. If implemented with flexibility this *Plan* can help the state and Seacoast communities respond quickly and efficiently to changing needs and conditions, and to new scientific knowledge and technical progress.

The New Hampshire Estuaries Project invites everyone who is interested to review the *Plan* and find ways to get involved in the many efforts to protect and improve the environmental quality and quality of life in the region.